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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/649,334	08/27/2003	John W. Tadlock	085455-9510-00	4581
23409	7590	08/04/2006	EXAMINER	
MICHAEL BEST & FRIEDRICH, LLP			KIM, SUN U	
100 E WISCONSIN AVENUE			ART UNIT	
MILWAUKEE, WI 53202			PAPER NUMBER	

1723

DATE MAILED: 08/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/649,334

Applicant(s)

TADLOCK, JOHN W.

Examiner

John Kim

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 26 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 15-24 and 48-51 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 15-24 and 48-51 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

1. Claims 1-14 and 25-47 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to nonelected inventions, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on November 21, 2005.

2. Claims 15 and 19 are objected to because of the following informalities: “a first port” on line 5 of claim 15 should be corrected to “a first fluid port” to provide antecedent basis in dependent claim 22. After “port” on line 2 of claim 19 should recite “of the first head” to identify that the first fluid port is of the first head.

Appropriate correction is required.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 18 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Recitation of “the third connection location” on line 2 of claim 18 lacks a positive antecedent basis.

5. Claims 15-24 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: connectors configured to define a fluid relationship between the first fluid treatment module and the second fluid treatment module that is both parallel flow and series flow in the first or second orientation of the first head with the respect to the second head.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 15-24 and 48-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rothwell, U.S. Patent No. 5,407,571.

Rothwell discloses a modular fluid treatment system, comprising: a first fluid treatment module (Fig. 1, #B) having a first head (Fig. 2, #1); and first (Fig. 1, #31'), second (#21'), and third (#22') fluid ports on the first head, each of the fluid ports on the first head providing connection locations to which the first head can be connected to at least one other fluid treatment module; a second fluid treatment module (Fig. 1, #A) having a second head (Fig. 2, #1); and a first port (Fig. 1, #31) on the second head; the first head having a first orientation with respect to the second head in which the first fluid port (#31') of the first head is in a first connection location and in which the second fluid port (#21') is in a second connection location (Fig. 1), and a second orientation with respect to the second head in which the third fluid port (Fig. 4, #31') of the first head (#D) is in the first connection location and in which the second fluid port (Fig. 4, #32'') is in a third connection location wherein the second orientation is achieved by 180 degree rotation of the first head as shown as #D in Fig. 4 (see Fig. 1-2, 4; col. 3, line 24 – col. 6, line 64). Rothwell teaches the parallel flow is achieved in the first orientation (see flow arrows between modules A, B and C) without the blank plate (#50) with an selective opening and the series flow in second orientation (see flow arrows between modules C, D, E) is achieved by blank plate (#50) with selectively opening located between the fluid treatment modules (see Fig. 4; col. 6, lines 30-64). Claim 15 essentially differs from the system of Rothwell in reciting that the first orientation and the second orientation each allowing both parallel flow and series flow

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with the second head. Rothwell teaches that the flow path from inlet opening can take two paths wherein one path for the fluid to enter into the filter bowl, pass from there through the filter element and then into the discharge channel to the outlet opening and the other path simply bypass the filter element and travel directly to the outlet opening (see col. 5, lines 14-23). This indicates that the inlet openings and outlet openings are all interconnected through flow paths and furthermore, inlet openings and outlet openings can be interchangeable and reversible (see col. 5, lines 29-36). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Rothwell to employ blank plates (#50) in the first orientation to achieve series flow and remove blank plates (#50) in the second orientation to achieve parallel flow.

Regarding Claim 16, Rothwell discloses that the heads (#1) of the first and second fluid treatment modules are substantially identical (Fig. 1-2).

Regarding Claim 17, Rothwell discloses that the first head has a fourth fluid port (Fig. 1, #32'); and the fourth fluid port (Fig. 4, #21') is in the second connection location (Col. 6, Lines 43-55) in the second orientation of the first head (#D).

Regarding Claim 18, Rothwell discloses that the fourth fluid port (Fig. 1, #32') is in the third connection location in the first orientation of the first head (#B).

Regarding Claim 19, Rothwell discloses that the first fluid port (Fig. 1, #31') of the first head (#B) is releasably connectable to the first fluid port (Fig. 1, #32) of the second head (#A) in the first orientation of the first head (#B).

Regarding Claims 20-21, Rothwell discloses that the second head (#A) includes a second fluid port (Fig. 1, #22) releasably connectable to the second fluid port (Fig. 1, #21') of the first head (#B) in the first orientation of the first head.

Regarding Claim 22, Rothwell discloses that the third fluid port (Fig. 4, #31') of the first head (#D) is releasably connectable to the first fluid port (Fig. 4, #32) of the second head (#C) in the second orientation of the first head (#D).

Regarding Claim 23, Rothwell discloses that the first (Fig. 1, #31') and second (#21') fluid ports of the first head (#B) are located on a side of the first head opposite the third (#22') fluid port of the first head (#B).

Regarding Claim 24, Rothwell discloses that the first (Fig. 1) and second (Fig. 4) orientations of the first head (#B, #D) are separated by approximately 180 degrees of rotation of the first head (see col. 6, lines 38-64).

Regarding claim 48, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Rothwell to employ blank plates (#50) in the first orientation to achieve series flow as explained in above rejection of claim 15.

Regarding claim 49, Rothwell disclose that blank plates (#50) are used to define a fluid relationship between the first fluid treatment module (#D) and the second fluid treatment module (#E) that is a series flow when the first head is in the second orientation with respect to the second head (see flow arrow between modules D and E in Fig. 4; col. 6, lines 38-64).

Regarding claim 50, Rothwell disclose that modules (#A, #B) are joined in mounting faces (#25, #35) of the heads to form a parallel flow between the first fluid treatment module

(#B) and the second fluid treatment module (#A) when the first head is in the first orientation with respect to the second head (see flow arrow between modules A and B in Fig. 4).

Regarding claim 51, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Rothwell to remove blank plates (#50) in the second orientation to achieve parallel flow as explained in above rejection of claim 15.

8. Applicant's arguments with respect to claims 15-24 and 48-51 have been considered but are moot in view of the new ground(s) of rejection. New recitation of "the first orientation and the second orientation each allowing both parallel and series flow with the second head" in claim 15 has been met by Rothwell as rejected in above paragraph 7.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


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10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Pat. No. 5,128,035 and US 2005/0178711 teach an assembly with connected filter heads.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Kim whose telephone number is 571-272-1142. The examiner can normally be reached on Monday-Friday 7 a.m. - 3:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Kim can be reached on 571-272-1142. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
**John Kim**  
**Primary Examiner**  
**Art Unit 1723**

JK

August 2, 2006